

**Iowa Department of Natural Resources
Environmental Protection Commission**

ITEM

8

DECISION

**TOPIC Agreement - Department of Natural Resources and Iowa State University
 - Research on Use of Loans to Implement Agricultural Best Management
 Practice**

Environmental Protection Commission approval is sought for an agreement between DNR and Iowa State University. The purpose of the project is to conduct research on two of the non-point source loan programs that are part of the Clean Water State Revolving Fund. These programs, the Local Water Protection (LWP) Program and the Livestock Water Quality (LWQ) Facilities Program, target the adoption of agricultural best management practices to protect water quality.

ISU's Department of Sociology will use surveys, focus groups, and interviews to collect and analyze data on knowledge, attitudes, and behavior related to use and facilitation of loans for water quality practices such as soil and sediment control, manure management, conservation buffers, and others.

The LWP and LWQ programs have disbursed \$8.5 million and \$3.9 million respectively since 2005. These programs have been successfully launched. The research is intended to provide information to guide program implementation going forward. The research questions include:

- Why has the usage of the program varied so widely around the state? Some districts have exceeded \$1 million in loans, while many others have zero usage.
- Why have some landowners/producers been willing to borrow 100% of the project costs? What motivates them to complete their projects without receiving cost share or grant incentives? How could financing programs better complement grant and cost-share programs?
- How is the changing landscape of farming, including demographics, land ownership patterns, land prices, profitability of livestock, and crop prices, affecting the willingness to finance the adoption of best management practices?

The agreement provides ISU with reimbursement for faculty and project officer time, as well as survey costs, travel for focus groups, and transcription of focus groups and interviews. The agreement allows up \$42,427 for the contract period March 15, 2008 to February 15, 2009. Funds for the agreement come from Clean Water State Revolving Fund administrative accounts. J. Gordon Arbuckle, Jr., Ph.D., assistant professor in the Department of Sociology, will be the principal investigator. His general research area is the sociology of agriculture and the environment. He is also working with Dr. Paul Lasley on the Iowa Farm and Rural Life Poll,

Contract No.

which for 25 years has been a gauge of the attitudes of Iowa's farmers. Also participating will be Lois Wright Morton, Ph.D., associate professor of sociology in the Department of Agriculture at ISU.

Patti Cale-Finnegan
Water Quality Bureau
March 20, 2008

IOWA DEPARTMENT OF NATURAL RESOURCES

Contract Number:

Contract Title: **Program Evaluation of the State Revolving Fund Loan Programs for Agricultural Best Practices**

Contract Amount: **\$42,427**

Time of Performance: **March 15, 2008 – February 15, 2009**

ISU Contacts

Project Officer: **J. Gordon Arbuckle, Jr., Ph.D.**

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ISU Office of Sponsored Programs Administration

Phone: (515) 294-5225

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Mailing Address: 1138 Pearson Hall, Ames IA 50011-2207

DNR Contract Officer: **Patricia Cale-Finnegan**

Phone: (515) 725-0498

Email: patti.cale-finnegan@dnr.iowa.gov

Mailing Address: Iowa Department of Natural Resources, 401 SW 7th Street, Suite M, Des Moines, Iowa 50309

Submit Original Invoice:

Department of Natural Resources

ATTN: Shirley Christoffersen

Wallace State Office Building

502 E. 9th Street

Des Moines, IA 50319-0034

Issue Payment to:

Iowa State University

3609 Administrative Services Building

Ames, IA 50011-3609

FEDERAL ID 42-6004224

The Contractor agrees to deliver all supplies and perform all services set forth in the attached Special Conditions, for the consideration stated herein. The rights and obligations of the parties to this Contract shall be subject to and governed by the attachments, the Special Conditions and the General Conditions. To the extent of any inconsistency between the attachments, Special and General Conditions and any specifications or other conditions which are made a part of this Contract by reference or otherwise, the Special and General Conditions shall control. To the extent of any inconsistency between the Special and the General Conditions, the Special Conditions shall control.

IN WITNESS WHEREOF, the parties hereto have executed this Contract.

IOWA STATE UNIVERSITY

IOWA DEPT. OF NATURAL RESOURCES

By: _____
Joanne K. Altieri
Director, Office of Sponsored Programs

By: _____
Elizabeth Christiansen
Deputy Director

Comment [A1]: Recent contracts with ISU have been signed by Joanne.

Date: _____

Date: _____

SPECIAL CONDITIONS

ARTICLE I. IDENTIFICATION OF PARTIES AND PROJECT

This agreement is entered into by and between the Iowa Department of Natural Resources (hereinafter referred to as “the Department” or the “DNR.”) and the Iowa State University (hereinafter referred to as the Contractor or ISU) to complete the project, *Program Evaluation of the State Revolving Fund Loan Programs for Agricultural Best Practices*. This agreement and the level of funding implied herein are exclusive of, and in addition to, any other agreements between the referenced parties.

ARTICLE II. DESIGNATION OF OFFICIALS

2.1 Department. The Deputy Director of the Department is the official authorized to execute any changes in the terms, conditions, or amounts specified in this contract. Patricia Cale-Finnegan is designated to negotiate on behalf of the Department and, subject to the approval of the Director, make any changes to the Contract.

2.2 Contractor. The Director of the Iowa State University Office of Sponsored Programs Administration or her designee is the official authorized to execute any changes in the terms, conditions, or amounts specified in this contract on behalf of Iowa State University.

2.3 Key Personnel for Contractor. J. Gordon Arbuckle, Ph.D.

Comment [ak2]: ISU does not list co-pi's on its sponsored research agreements

ARTICLE III. TIME OF PERFORMANCE

The Contractor shall commence work on this Contract on the beginning date and complete Contract tasks by the ending date. The term of this contract shall be March 15, 2008 through February 15, 2009.

ARTICLE IV. STATEMENT OF PURPOSE

4.1 **Project Purpose.** The purpose of this project is to conduct research on knowledge, attitudes, and behavior related to use and facilitation of loans for agricultural best management practices, including soil and sediment control, manure management, conservation buffers, and others, to protect water quality. The information will be used to expand the use of loan programs for these practices.

Comment [A3]: It might be helpful for the EPC commissioners if you added something here about how the info will be used and what problem it will help to solve. I know that is evident later, but it might be helpful to summarize it here.

4.2 Purpose of Programs. The Clean Water State Revolving Fund's Iowa Water Quality Loan Fund is designed to improve water quality through provision of low-interest loans. The Loan Fund comprises four programs aimed at improving water quality by reducing non-point source pollution: The Onsite Wastewater Assistance Program (OSWAP), the Local Water Protection Program (LWP), the Livestock Water Quality Facilities (LWQ) Program, and the General Non-Point Source (GNS) Program.

The LWP and LWQ programs are designed to be mechanisms for increasing the rate, scope, and scale of agricultural best management practices in Iowa. LWP and LWQ loans

are meant to facilitate landowner and producer implementation of best management practices by decreasing the financial burden associated with practice adoption. In addition, in cases where LWP and LWQ loans allow landowners/producers to forgo state or federal grant or cost-share funds, or accept a lower level of grant or cost-share, they can potentially spread limited cost-share and grant allocations across more practices on more farms.

- 4.3 Research Problem. The research to be conducted by Contractor will focus on the LWP program and the LWQ program, which target agricultural best practices. The LWP and LWQ programs have disbursed \$8.5 million and \$3.9 million respectively since 2005. However, the usage of the programs has varied widely around the state. Several districts have exceeded \$1 million worth of loans, while others have no usage. In addition, while most borrowers have used the loans in conjunction with grants or cost-share funds, about 25% of the LWP and 33% of the LWQ borrowers used loans for 100% of the project costs. Contractor's research will explore knowledge, attitudes, and behavior regarding program participation and non-participation among agricultural landowners and producers.

Several organizations are involved in LWP and LWQ projects, including Soil and Water Conservation District (SWCD) commissioners and staff, Natural Resources Conservation Service staff at the local and state level, ISU Extension staff, the Iowa Department of Agriculture and Land Stewardship Division of Soil Conservation, the Iowa Agricultural Development Authority, the Department of Natural Resources, and the Iowa Finance Authority. Contractor's research will explore knowledge, attitudes, and behavior of organization management and staff regarding promotion of the agricultural loan programs.

- 4.4 Research Questions. Contractor shall use the following general research question to guide the study:

Why are Iowa landowners/producers not taking full advantage of the Local Water Protection and Livestock Water Quality Facilities programs to finance their efforts to establish agricultural best management practices?

To address this question, Contractor's research shall examine a number of dimensions at both the individual and organizational levels. Research questions and approaches specific to each level are outlined below.

Comment [A4]: This is vague, and it would be hard to tell when it was accomplished. Is there any more specific way to say this?

Individual Level

Program Participants

At the center of the study are LWP and LWQ program participants. Program participants represent program "success" in that the farm landowners/producers who have taken loans have used them to finance some portion of their best management practices. Contractor's research shall develop a theory regarding 1) why these landowners/producers decided to participate in the loan programs and 2) their perspectives on the programs. Program participant sample may be stratified according to type of practice implemented.

Comment [A5]: I was trying to be more specific, but I am not sure I helped a lot.

Comment [A6]: Should this say "shall"?

Non-Participants

The LWP and LWQ program non-participants of interest are those landowners/producers who are causing or have the potential to cause non-point pollution through their agricultural activities, are eligible for the program, and have not applied for an LWP or LWQ loan. This group can be further separated into two groups: 1) non-participants who have not established best management practices since the LWP program was instituted, and 2) non-participants who have implemented eligible best management practices through state or federal programs since the LWP or LWQ program began but who did not apply for a loan. The non-participant sample frame shall only include landowners/producers who have implemented best management practices since the programs began and may be stratified based on type of practice implemented. Contractor's research shall theorize why wider participation among agricultural landowners/producers

Comment [A7]: Should this say "shall"?

has not occurred and shall specifically state the impediments to participation for each of the different groups.

Organizational Level

At the organizational level, the study shall focus on employees of the agencies of key importance to the successful implementation of the LWP and LWQ program: natural resource professionals (NRPs) from Soil and Water Conservation Districts (SWCDs), the Natural Resources Conservation Service (NRCS), and ISU Extension.

NRPs or are often the first points of contact for landowners/producers who are interested in implementing best management practices on their land. In many cases, landowners/producers depend on NRPs to provide them with information on the range of programs and practices available to support their environmental efforts. Contractor's solicitation of perspectives from areas with varied levels of program participation shall shed light on organizational factors that are facilitating or impeding LWP and LWQ program implementation across the state.

ARTICLE V. SCOPE OF WORK

- 5.1 This research shall be a joint effort between the Iowa State University Department of Sociology and the Iowa Learning Farm (ILF) project. The ILF, a partnership between the Iowa Department of Agriculture and Land Stewardship, Iowa Department of Natural Resources, Natural Resources Conservation Service, Leopold Center for Sustainable Agriculture, Iowa State University Extension, Conservation Districts of Iowa and Iowa Farm Bureau Federation, is an umbrella project that allows ISU Extension to provide leadership and cooperation across the university and amongst agencies.

Dr. J. Gordon Arbuckle, Jr., ISU Extension Sociologist, shall be the lead Principal Investigator (PI) for the project. Dr. Arbuckle shall provide overall leadership and management for the research team. Co-PIs on the project shall be Dr. Lois Wright Morton, ISU Extension Sociologist, and Dr. Jacqueline Comito, ILF Associate Coordinator and Project Evaluator. Drs. Morton and Comito shall provide expertise in the development of the survey and focus group and interview protocols, and shall assist in the analysis of data and writing of the technical report.

Contractor shall identify a Project Coordinator who shall be responsible for logistics associated with the survey and focus groups. The Project Coordinator shall assist in the development and formatting of the survey and coordinate its printing, mailing, and collection following the Dillman Tailored Design Method. He or she shall also supervise data entry using the SPSS Dimensions software. For the focus groups, the Project Coordinator shall be responsible for scheduling and coordination and shall assist the PIs in conducting them.

5.2 Survey of Program Participants. Contractor shall develop a written survey and distribute it to a group of approximately 800 participants in the LWP and LWQ programs. The participant sample frame may be stratified based on type of practice implemented. Contractor use mailing lists provided by DNR. The survey instrument shall solicit the following information:

- How did participants learn about the programs?
- What were their primary motivations for participation?
- Who did they work with as they navigated the application and implementation process?
- What were their perceptions, positive and negative, about the application process and program effectiveness?

In addition to program-related data, the survey shall collect demographic, economic, attitudinal, and ecological data on participants including:

- Basic personal characteristics: age, education, gender, life-cycle stage, years in farming, plans for the future, operator/owner status;
- Farm characteristics: farm size, commodity mix, income (farm/non-farm), debt, ecological conditions (presence of waterways, erosion potential, land capability class (LCC), corn suitability ranking (CSR), etc.), type of livestock operation, animal species and numbers, and others as appropriate;
- Farm location (county);
- Motivations and attitudes toward conservation;
- Motivations for landownership (esp. non-operator landowners)
- Contacts with natural resource professionals, Extension, and other network linkages with agency staff;
- Peer networks and relationships others who have influenced their environmental ethics and decisions to implement various conservation structures; and,
- Relationships with lenders.

5.3 Survey of Non-Participants. Contractor shall develop a written survey of non-participants and distribute it to identified groups of non-participants. Contractor shall obtain mailing lists from cooperating agencies with DNR assistance. To control for both ecological and institutional effects on LWP and LWQ program participation, the population of non-participants shall be split into two groups from which random samples shall be drawn. The first non-participant sample frame shall include all non-participant best management practice implementers in counties that have high LWP or LWQ participation rates (threshold to be determined, perhaps >\$100,000). The second sample frame shall consist of non-participant best management practice adopters in low-participation counties (threshold to be determined). Half of the non-participants shall be drawn from each sample frame, resulting in an overall sample equivalent to the number of

participants (approximately 800). The sample frame may be stratified based on type of practice implemented.

The survey of non-participants shall collect data on the same demographic, economic, attitudinal, and ecological variables that are listed above for participants. Questions relating to the LWP and LWQ programs shall be necessarily different, focusing on reasons for non-participation rather than program experience. Questions that measure reasons for non-participation shall

Comment [A8]: I am pretty sure this should be "shall."

- Were non-participants aware of or made aware of the programs?
- Who did they work with throughout the practice adoption process?
- Through what programs did they adopt their practices?
- What level of cost-share or other financial support (if any) did they receive?
- How did they finance their portion of the practice costs?
- What were their primary motivations for practice adoption?

- 5.4 Database and Statistical Analysis. Data from the surveys of participants and non-participants shall be compiled into a database and statistical analyses shall be employed to develop a comprehensive understanding of participants and the factors that influenced their decisions to participate in the LWP or LWQ program.

Contractor shall develop statistical analyses of differences and similarities among the three groups--participants, non-participants from high-participation counties, and non-participants from low-participation counties to facilitate identification of the factors associated with participation and non-participation.

- 5.5 Organization Research. Contractor shall use focus groups and in-depth interviews to explore NRP knowledge, attitudes, and behaviors regarding the LWP and LWQ programs. Focus groups and interviews shall be held with a mix of SWCD, NRCS, and ISU Extension staff from several counties that shall be selected based on level of LWP program participation. Contractor shall consult with DNR to select and recruit NRPs from two counties in each of three categories for focus groups and follow-up interviews:

- High participation: > \$500,000 (e.g., Davis, Henry, Page);
- Medium participation: \$100,000 to \$300,000 (e.g., Adair, Cass, Madison); and,
- Low participation: \$0 - \$100,000 (e.g., Boone, Crawford, Iowa).

Contractor shall hold six focus groups shall be held NRPs. Contractor shall conduct in-depth follow-up interviews to further explore key issues identified in the focus groups.

Specific topic areas to be explored in the focus groups and interviews shall include:

- Perceptions of program utility, appropriateness, and ease of use;
- Landowner/producer responses to the programs;
- Internal and external constraints on the use of the programs; and,
- Existence of competing programs.

5.6 Data Retention. Contractor shall retain all collected data, records, documentation from the survey. Upon the conclusion of the contract, all data, records and documentation collected or generated from the survey shall be returned to DNR.

5.7 Research Report. Contractor shall analyze data and information collected from surveys, focus groups, and in-depth interviews and compile it into a report for DNR. The report shall also include recommendations for improving marketing efforts based on a better understanding of current and potential program participants and organization staff.

5.8 DNR Responsibilities. DNR shall perform the following tasks:

- Participate in meetings and provide information on programs.
- Reimburse ISU for its work under this contract from the administration account of the Clean Water State Revolving Fund. The amount of reimbursement to occur is set out in the Compensation section of this contract.
- Provide mailing lists of LWP and LWQ program participants.
- Approve the survey forms.
- Print and mail survey forms.
- Coordinate with ISU to assure contract requirements are being met.

ARTICLE VI. MILESTONES.

Contractor shall begin and complete the project tasks and products under the following timetable:

Start Date	Complete Date	Task	Work Product
March 15, 2008	May 15, 2008	Develop research plan <ul style="list-style-type: none">• Analyze existing LWP and LWQ program data to inform research design and survey development• Meet with CWSRF program representatives to refine research questions and develop overall research plan	Research Plan

April 15, 2008	June 15, 2008	Develop and test survey instruments for participants and non-participants <ul style="list-style-type: none"> • Submit instruments to DNR for approval 	Participant and Non-Participant Surveys
May 15, 2008	July 15, 2008	Develop focus group and in-depth interview protocols	Moderator and interviewer guides
May 15, 2008	June 15, 2008	Develop participant and non-participant sample frames	Survey lists
June 15, 2008	August 15, 2008	Print and distribute surveys, collect data	Survey instructions and materials
August 15, 2008	November 15, 2008	Implement focus groups and interviews	Focus group recordings and interview notes
August 15, 2008	January 15, 2009	Analyze data and prepare and submit draft report to DNR	Draft research report
January 15, 2009	February 15, 2009	Make changes to report as necessary based on comments provided by DNR	Approved research report

ARTICLE VII. PROGRESS REPORTS

Contractor shall submit to DNR project manager bi-monthly progress reports on the following dates:

June 1, 2008	For reporting period March 15 – May 15, 2008
August 1, 2008	For reporting period May 15 – July 15, 2008
October 1, 2008	For reporting period July 15 – September 15, 2008
December 1, 2008	For reporting period September 15 – November 15, 2008
February 1, 2009	For reporting period November 15, 2008 – January 15, 2009

If Contractor is unable to meet a Task Milestone contained in this Contract, then Contractor shall notify the DNR no later than ten (10) days after the deadline. At that time, Contractor shall submit a work plan for completing the work products that shall include when and how the work product shall be completed. DNR shall then approve, in writing the submitted plan. Contractor's failure to timely comply with the requirements of an approved work plan shall constitute material breach of this Contract by Contractor and shall be grounds for DNR to immediately terminate this Contract for cause.

ARTICLE VIII. REVIEW OF WORK

- 8.1 The Department or its advisers shall have the right to review and observe at any time, completed work or work in progress on the Project. Operations of the Department pertaining to this program shall be open to the Contractor as well.

8.2 Meetings. Contractor shall participate in an initial consultation meeting to review the contract and the Statement of Work. Commencing with beginning performance of this Contract, the Project Managers shall meet monthly to discuss progress made by the Contractor during the performance of this Contract. The meetings shall occur, either in person or by telephone conference call. Meetings may be postponed only on a case-by-case basis by mutual written agreement of the parties.

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8.3 Resolution of Problems. At the next scheduled meeting after which any party has identified in writing a problem, the party responsible for resolving the problem shall provide a summary setting forth activities undertaken, or to be undertaken, to resolve the problem, together with the anticipated completion dates of such activities. Any party may recommend alternative courses of action or changes that shall facilitate problem resolution.

ARTICLE IX. FUNDING

The source of funding for this contract is the Iowa CWSRF administration account.

ARTICLE X. PAYMENT

10.1 This Contract is entered into on a not-to-exceed basis. The Contractor shall be paid an amount not-to-exceed \$42,427 in bi-monthly payments based on actual costs and based on satisfactory completion of the Statement of Work outlined in this contract, provided that Contractor has complied with the terms of this contract.

10.2 Travel expenses approved by the Department will be reimbursed as incurred.

10.3 The budget for this contract for fiscal years 2008 and 2009 is listed below and is by this reference made a part hereof.

Budget Item	Amount
Salaries	
Dr. J. Arbuckle (Lead PI): 2.2% FTE	\$1,500
Dr. Lois Wright Morton (Co-PI): 1.8% FTE	\$1,500
Dr. Jacqueline Comito (Co-PI): 7.5% FTE	\$4,500
P&S Project Coordinator-To be named: 50% FTE for 6 months	\$10,000
Benefits	
Dr. J. Arbuckle: 26.7%	\$401
Dr. Lois Wright Morton: 26.7%	\$401

Dr. Jacqueline Comito: 32.7%	\$1,472
P&S Project Coordinator: 32.7%	\$3,270
Travel-Domestic	
Travel for SWCD-NRCS focus groups: 6 @ \$100	\$600
Travel for follow-up interviews w/SWCD-NRCS: 6 @ \$100	\$600
Supplies/Materials	
Mailing labels	\$140
Other Direct Costs	
Surveys printed and distributed to 1,600 subjects using Dillman method and Dimensions survey software scanning system @\$7.50	\$12,000
Transcription (Contracted Services via Purchase Order)	
-Focus group transcripts 6 @ \$200	\$1,200
-Interview transcripts 6 @ \$200	\$1,200
Honoraria/Services	
-Publication and distribution of technical report	\$500
Subtotal	\$39,284
Indirect Costs @ 8%	\$3,143
Total	\$42,427

GENERAL CONDITIONS

Section 1.0 Entire Agreement

This Contract with all attachments and references constitutes the entire Agreement between the Department* and the Contractor with respect to the subject matter hereof, and the Contractor acknowledges that it is entering into the Contract solely on the basis of the terms and conditions herein contained and not in reliance upon any representative statement, inducement or promise, whether oral or written, not contained herein.

Section 2.0 Amendment

The Department or the Contractor may initiate an amendment to this Contract. Any amendment is effective only if in writing and agreed to by the Department and the Contractor. The amendment shall be effective as of the date it is agreed upon, unless otherwise specified in the amendment.

Section 3.0 Availability of Data

All information and data obtained by the Contractor in connection with the Contract shall be made available to the Department. One copy of such information and data shall become the property of the Department except that which is necessary for any patent or copyright purposes of the Contractor.

Section 4.0 Assumption of Risks and Liabilities

The Contractor shall assume all risks and liabilities in connection with the performance of the Contract and shall be responsible for all claims, demands, actions or causes of action of whatever nature or character arising out of or by reason of the execution or performance of the work provided for herein. The Contractor shall indemnify and hold harmless the Department, its employees, agents or representatives, and the state of Iowa from all claims, demands, actions or causes of action, and shall be responsible for attorney fees, costs and expenses incurred by the Department, its employees, agents or representatives and the state of Iowa, except to the extent caused by the state of Iowa, to the full extent permitted by Chapter 669, Code of Iowa.

Section 5.0 Transfer of Work

The Contractor shall not transfer or assign any part or portion of the work on the Contract, other than specified in the scope of work and/or budget documents (Special Conditions) without the prior written consent of the Department.

Section 6.0 Review of Work

* Iowa Department of Natural Resources

The Department shall have the right to review and observe, at any time, completed work or work in progress on the Contract.

Section 7.0 Publications

- 7.1 All of the Contractor's reports and publications pertaining to work performed under this Contract shall contain the following statement on the credit sheet:

"This project was supported, in part, by the Iowa Department of Natural Resources, through **Grant No.** _____. However, any opinions, findings, conclusions or recommendations expressed herein are those of the author(s) and do not necessarily reflect the views of IDNR."

- 7.2 The Department reserves the right to publish the reports once completed by the Contractor and delivered to the Department. Written and oral releases are considered to be within the context of publication rights so reserved by the Department. The contractor shall not publish interim reports without prior written consent of the Department.
- 7.3 Nothing in this section shall be construed to limit the rights of the Contractor to publish data or information in scholarly or professional journals as long as any copyright to be obtained is not prejudiced thereby. There shall be no pre-release of data or findings connected with this Contract in scholarly or professional journals or through public presentations or news media until the Contract is completed, unless prior written approval for such release has been given by the Department. Doctoral dissertations and master's theses resulting from work under this agreement are exempt from prior approval. Copies of such works will be provided to the Department prior to defense. Contract completion is defined herein as termination of the Contract.
- 7.4 All reports interim and final, published by either the Contractor or the Department, will give credit to the other party's participation in the Contract.
- 7.5 Neither the Department nor the Contractor shall use the name of the other for advertising, promotional, or publicity purposes without the prior written consent of the other.

Section 8.0 Accounts and Records

- 8.1 The Contractor agrees to maintain books, documents, and other records pertaining to all costs and expenses incurred and revenues acquired during this Contract to the extent and in such detail as will properly reflect all costs, direct and indirect, of labor, materials, equipment, supplies and services, and other costs and expenses of

whatever nature for which reimbursement is claimed. The Contractor shall be prepared to support charges for salaries and wages by time, attendance and payroll records.

- 8.2 The Iowa Department of Natural Resources, State Auditor, U.S. Department of Energy, and Comptroller General of the United States, or any of their duly appointed representatives, shall have access for the purpose of audit and examination to any books, documents, papers and records of the Contractor which are pertinent at all reasonable times during the period of retention provided for in paragraphs 8.3, 8.4, and 8.5 below and shall have the right to make copies of excerpts or make other transcriptions thereof, subject to the provisions of 199 Iowa Administrative Code Section 1.9 and Iowa Code Chapter 22.
- 8.3 All records in the possession of the Contractor pertaining to this Contract shall be retained by the Contractor for a period of three (3) years beginning with the date upon which the final payment under this Contract is issued. Records for nonexpendable property acquired under this Contract shall be retained for a three (3) year period after the final disposition of the property.
- 8.4 Records relating to any litigation or claim arising out of the performance of this Contract, or costs or expenses of this Contract to which exception has been taken as a result of inspection or audit, shall be retained by the Contractor until such litigation, claim, or exception has been finally settled or until the three (3) year period has expired, whichever occurs later.
- 8.5 The Contractor, in maintaining Contract expenditure accounts and records and reports, shall make any necessary adjustments to reflect refunds, credits, underpayments or overpayments, as well as any adjustments resulting from any administrative reviews and audits by the United States or by the state of Iowa or by the Contractor. Such adjustments shall be set forth in the financial reports filed with the Department.

Section 9.0 Allowable Costs

- 9.1 Allowable costs are specified under the Approved Budget of this Contract. Allowable costs are subject to audit under the principles defined in Office for Management and Budget (OMB) Circulars A-21, A-87, A-102, A-110, and A-122, whichever is applicable to Contractor.
- 9.2 Indirect cost rates, if applicable, shall be determined according to the principles defined in Office for Management and Budget (OMB) Circulars A-21, A-87, A-102, A-110, and A-122, whichever is applicable to Contractor.

Section 10.0 Unallowable Costs

The following costs are unallowable under this Contract:

- a. Legal expenses for the prosecution of claims against the Department, the State of Iowa, the Federal Government, or any subdivision thereof;
- b. The difference in costs between first class air accommodations and less than first class air accommodations, unless less than first class air accommodations are not available;
- c. Costs incurred prior to the effective date of the Contract;
- d. Costs of preparing proposals for potential contracts;
- e. Bad debts (any losses arising from uncollectible amounts and other claims and related costs);
- f. Contingencies (contributions to a contingency reserve or any similar provision for unforeseen events);
- g. Contributions or donations;
- h. Entertainment (cost of amusements, social activities, and incidental costs relating thereto, such as meals, beverages, lodgings, rentals, transportation, and gratuities);
- i. Fines and penalties (costs resulting from violations of, or failure to comply with federal, state and local laws and regulations);
- j. Other financial costs (interest on borrowings -- however represented, bond discounts, costs of financing and refinancing operations, and legal and professional fees paid in connection therewith).
- k. Indirect costs are not allowable per Section 10.3 of the Special Conditions.

Section 11.0 Termination of Contract

- 11.1 Termination for cause - The Department may terminate this Contract in whole or in part, at any time before the expiration date, with a 15 day notice of termination and right to cure whenever the Department has determined that the Contractor has materially failed to comply with the conditions of the Contract. The Department shall promptly notify the Contractor in writing of the determination and reasons for termination, together with the effective date. Payments made to the Contractor or recoveries by the Department under Contracts terminated for cause shall be in accord with the legal rights and liabilities of the parties.
- 11.2 Termination for convenience - The Department or Contractor may terminate the Contract in whole or in part when both parties agree that the continuation of the Contract would not produce beneficial results commensurate with the future expenditure of funds with at least a 30 day termination notice. The two parties shall agree upon the termination conditions, including the effective date and, in the case of partial terminations, the portion to be terminated. The Contractor shall not incur new obligations for the terminated portion after the effective date and shall cancel as may outstanding obligations as possible. The Contractor shall prepare and deliver to the Department copies of a final report summarizing the work performed and the results obtained to date, together with such information and items which, if the Contract had been completed, would have been required to be furnished to the Department.

Section 12.0 Patents

Title to any and all patentable discoveries and patents therefrom originating as result of any sponsored research set forth in this Agreement shall be vested in the Contractor. The Contractor shall evaluate each such discovery, and if in its judgment the attendant circumstances warrant filing a patent application, it shall do so at its own expense. The state of Iowa and any department or divisions thereof, and all political subdivisions within the state shall be entitled to an irrevocable, non-exclusive, royalty-free license for government purposes under any patent held by the Contractor which originates under this Agreement.

Section 13.0 Copyrights and Use of Data

- 13.1 The term "subject data" as used herein includes research data and reports, writings, sound recordings, pictorial reproductions, drawings or other graphical representations, and works of any similar nature which are specified to be delivered under this Contract. The term does not include financial reports, costs analyses, and similar information incidental to Contract administration.
- 13.2 The Contractor shall be considered the author of all original subject data.
- 13.3 Subject to the provisions of Section 13.4 below, the state may duplicate, use, and disclose in any manner for any authorized state activity, and may allow others to do so, all subject data deliverable under this Contract.
- 13.4 In the event the Contractor secures a registered copyright, the Contractor agrees to and does hereby grant to the state, its officers, agents and employees acting with the scope of their official duties, a royalty-free, non-exclusive, and irrevocable license to publish, translate, reproduce, deliver, perform, dispose of, and to authorize others to do so for use by the state, its division, instrumentalities and local subdivisions, all subject data now or hereafter covered by a copyright. If such subject data is not originated in the performance of this Contract, such license shall be only to the extent that the Contractor, its employees or any individual or concern employed or assigned by the Contractor to originate and prepare such data under this Contract, now has, or prior to completion of final settlement of this Contract may acquire, the right to grant such license without becoming liable to pay compensation to others solely because of such grant.
- 13.5 The Contractor or any or all of its employees or agents may duplicate, use and disclose all subject data delivered under this Contract, provided that the Contractor or such employees or agents acknowledge the contribution of the Department and the Contract number of this Contract and any copyright secured for such subject data. There shall be no pre-release or publication of data or findings connected with this Contract in scholarly or professional journals or through public presentation or news release or otherwise until the performance of this Contract is

completed unless prior written authorization has been obtained from the Department.

Section 14. Notice and Assistance Regarding Patent and Copyright Infringement

- 14.1 The Contractor agrees to report to the Department promptly and in reasonable written detail, each notice or claim of patent or copyright infringement based on the performance of this Contract of which the Contractor has knowledge.
- 14.2 In the event of any claim or suit against the Department, the state of Iowa, their employees, agents, or representatives, or the United States, on account of an alleged patent or copyright infringement arising out of the work or services performed hereunder, the Contractor agrees to furnish the Department, upon request, all evidence and information in the possession of the Contractor pertaining to such suit or claim. Such evidence and information shall be furnished at the expense of the Department except where the Contractor has agreed to indemnify the Department.

Section 15.0 Equipment

- 15.1 Definition - As used herein, the term "equipment" means nonconsumable tangible personal property to be used in the performance of the Contract, having an acquisition cost of Five-Thousand (\$5000) Dollars or more, and useful life expectancy of greater than one (1) year.
- 15.2 All property procurements with a unit value of Five-Thousand (\$5000) Dollars or more must be approved in advance by the Department. All property procurement by the Contractor shall be according to standards stated in the Office for Management and Budget (OMB) Circular A-110, Attachments N & O. The title of all property purchased with a unit value of Five-Thousand (\$5000) Dollars or more remains vested with the Department.
- 15.3 Upon request, the Contractor shall provide the Department with invoice(s) of property purchased. Such purchased property must correspond with approved Contract items.
- 15.4 The Contractor will keep an inventory of the property in their jurisdiction. Inventories must include the following property characteristics: a) the serial number if applicable; b) the Contract Number (if acquisition occurred as part of the Contract); c) its description; d) the date of acquisition; e) invoice number, if purchased; f) the original purchase price; and g) the physical location of the property.

- 15.5 The Contractor shall maintain a control system to insure adequate safeguards to prevent loss, damage or theft to the property. Any loss, damage, or theft of property shall be investigated, fully documented and reported to the Department within sixty (60) calendar days of occurrence.
- 15.6 The Contractor shall implement maintenance procedures to keep all property in good condition. Maintenance costs in excess of one-half (1/2) the estimated current fair market value of property shall require prior Department approval.
- 15.7 Upon termination of this Contract or upon Department need of the property, all property shall be released to the Department. Appropriate disposition instruction will be issued to the Contractor after the Department's review. Any costs associated with the disposition or return of the equipment will be borne by the Department.

Section 16.0 Assignment of Interest

Neither the Contract nor any interest therein nor claim thereunder shall be assigned or transferred by the Contractor to any other party or parties. Attempted assignment may be considered, at the option of the Department, to be a substantial breach and cause for termination within the meanings of Section 11.1 of the General Conditions.

Section 17.0 Personnel

- 17.1 Selection - The Contractor represents that it has, or will secure, all personnel required in performing the work and services under this Contract. Such personnel shall not be employees of or have any contractual relationship with the Department.
- 17.2 Qualification - All of the work and services required hereunder will be performed by the Contractor or under its supervision and all personnel engaged in the work shall be fully qualified and shall be authorized under state and local law to perform such services.
- 17.3 Change of Key Personnel - Any individual specified by name under the article Key personnel within the Special Conditions herein is considered essential to the work and services to be performed. If for any reason substitution for a specified individual becomes necessary, the Contractor shall provide immediate written notification of such to the Department. The Contractor shall provide the name and resume of qualifications for the replacement individual. Any replacement shall be subject to the approval of the Department.

Section 18.0 Effect of Invalidity

If any of the provisions herein shall be in conflict with the laws of the state of Iowa, or shall be declared to be invalid by any court of record in this state, such invalidity shall be

construed to affect only such portions as are declared invalid or in conflict with the law and such remaining portions of the Contract shall remain in effect and shall be construed as if such invalid or conflicting portions were not contained herein.

Section 19.0 Litigation

- 19.1 To the full extent permitted by Chapter 669, code of Iowa and the laws of the State of Iowa, the Contractor agrees to pay the cost of any litigation arising from failure of the Contractor to comply with the conditions or terms of this Contract or resulting from the negligence or incompetence of the Contractor. In carrying out the provisions of the Contract or in exercising any power or authority otherwise, it is understood that in such matters the Department acts for the state.
- 19.2 The venue for any cause of action based upon this Contract by either party to this Contract, shall be in Polk County, Iowa, and the law of the state of Iowa shall apply.

Section 20.0 Assurance

- 20.1 The Contractor hereby assures and certifies to comply with the regulations, policies, guidelines, and requirements of the Office for Management and Budget (OMB) Circulars No. A-133, A-21, and A-110, and 47 CFR, No. 129, as they relate to the use of federal funds for this project.
- 20.2 The Contractor shall not discriminate against any employee or applicant for employment because of race, creed, color, religion, national origin, sex, age, political belief, or handicap, in its employment practices. Such employment practices may include, but are not limited to, recruitment, recruitment advertising, hiring, layoff or termination, promotion, demotion, transfer, rates of pay, training and participation in upward mobility programs, or other forms of compensation and use of facilities.
- 20.3 The Contractor will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding a notice advising the labor union or representative of the Contractor's commitments under this nondiscrimination clause and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- 20.4 The Contractor will comply with all relevant provisions of the Iowa Civil Rights Act, Iowa Executive Order #15 of 1973, Title VI of the Civil Rights Act of 1964 (P.L. 88-352), Section 16 of the Federal Energy Administrative Act of 1974 (P.L. 93-275), Section 401 of The Energy Reorganization Act of 1974 (P.L. 93-438), Title IX of the Educational Amendments of 1972, as amended (P.L. 92-318), P.L. 93-568, and P.L. 94-482), Section 504 of the Rehabilitation Act of 1973 (P.L. 93-112), the Age Discrimination Act of 1975, (P.L. 94-135), Title VIII of the Civil Rights Act of 1968 (P.L. 90-284), the Department of Energy Organization Act of

1977 (P.L. 95-91), and the Energy Conservation and Production Act of 1976, as amended (P.L. 94-385). The Contractor shall furnish all information and reports requested by the Department and will permit access to its payroll and employment records by the Department or the Department's grantor agency for purposes of investigation to ascertain compliance with this nondiscrimination clause.

- 20.5 In the event of the Contractor's noncompliance with the nondiscrimination clauses of this Contract, this Contract may be canceled, terminated or suspended in whole or in part and the Contractor may be declared ineligible for further contracts with the Department. In addition, the Department may take such further action, and such other sanctions may be imposed and remedies invoked, as provided by the Iowa Civil Rights Act, Chapter 601 A, Code of Iowa 1977, as heretofore and hereinafter amended, or as otherwise provided by law.
- 20.6 The Contractor will include the provisions of subsections 20.1 through 20.5 hereof, in every subcontract unless specifically exempted by approval of the Department, so that such provisions will be binding on each subcontractor and vendor. The Contractor will take such action with respect to any subcontractor as the state may direct as a means of enforcing such provisions including sanction for noncompliance; provided, however, that in the event the Contractor becomes involved in, or is threatened with, litigation with the subcontractor or vendor as a result of such direction by the state, the Contractor may request the state of Iowa to enter into such litigation to protect the interests of the state of Iowa.

Section 21.0 Contingent Fees

The Contractor warrants that it has not employed or retained any company or person, other than a bona fide employee working solely for the Contractor, to solicit or secure this Contract, and that it has not paid or agreed to pay any company or person, other than a bona fide employee working solely for the Contractor, any fee, gift, or any other consideration, contingent upon or resulting from the award or making of this Contract. For breach or violation of this warranty, the Department shall have the right to annul this Contract without liability or, otherwise recover, the full amount of such fee, commission, percentage, brokerage fee, gift, or contingent fee.

Section 22.0 Officers Not to Benefit

No officer or employee of the state shall participate in any decision relating to this Contract which affects his or her personal interest or the interest of any corporation, partnership, or association in which he or she is directly or indirectly interested; or have any interest, direct or indirect, in this Contract or the proceeds thereof.

Section 23.0 Audit Requirement

At the request of the Department the Contractor shall submit a copy of its regularly conducted annual audit(s), pursuant to OMB Circular A-133 to the Department for the

time period(s) encompassed by this Contract. If this audit is not performed or available, subsequent arrangements are to be made with the Department.

Section 24.0 Availability of Funds

If funds anticipated for the continued fulfillment of this agreement are at any time not forthcoming or insufficient, either through the failure of the Federal Government or of the State of Iowa to appropriate funds, or discontinuance or material alteration of the program under which funds were provided, then the Department shall have the right to terminate this agreement without penalty in accordance with Section 11.1 of the General Conditions by giving not less than thirty days written notice documenting the lack of funding.

Section 25.0 Information Technology Security

The Contractor and all Contractor personnel shall comply with Iowa information technology security statutes, rules and policies. By signing this contract, the Contractor acknowledges that the Contractor has read and understands the provisions of the information technology security policy adopted by the Iowa Department of Administrative Services (DAS) in effect on the date of signing. The Contractor further agrees to read and abide by any revised DAS policy, posted on the agency website that comes into effect during the term of this contract.